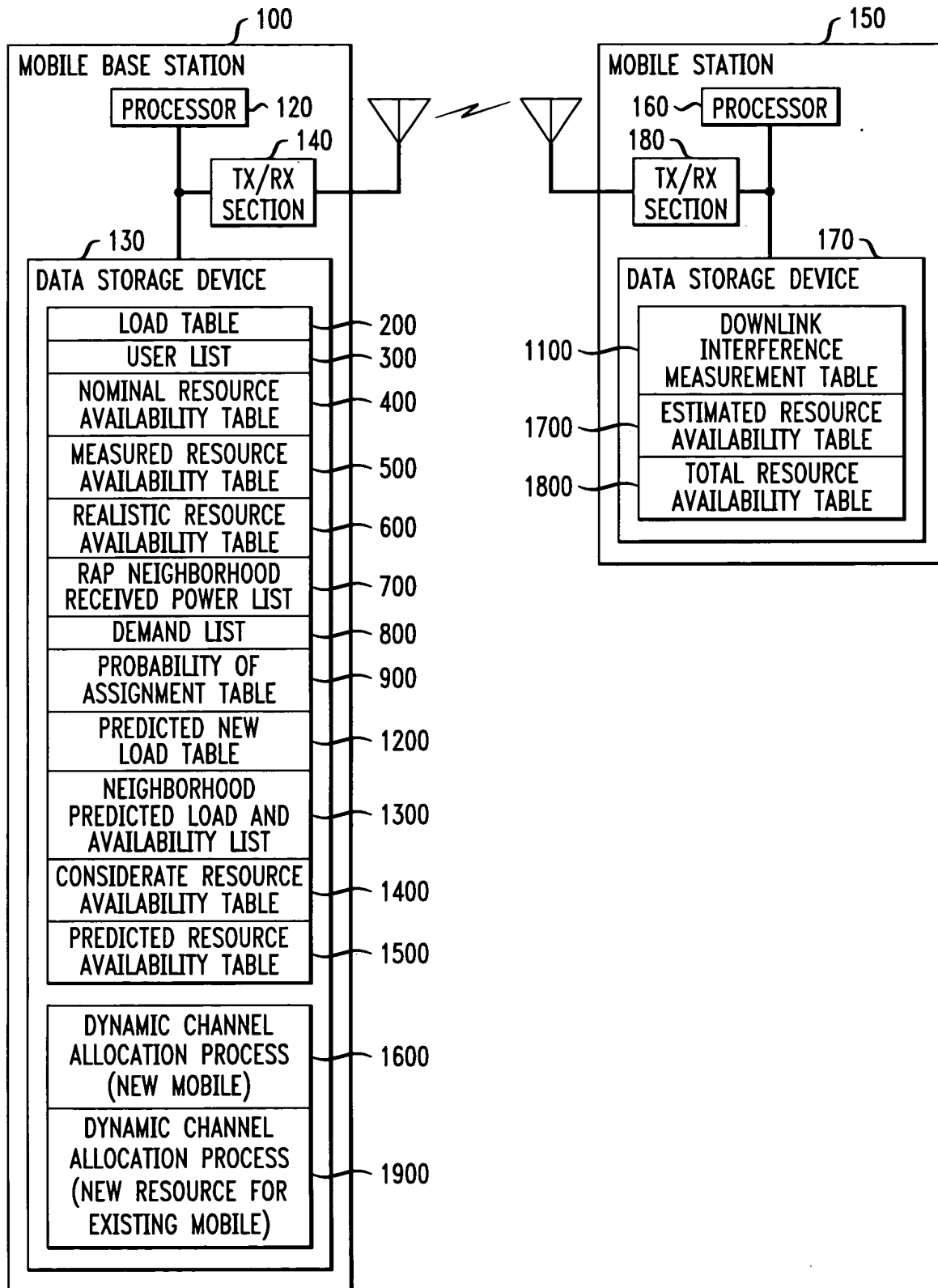


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FIG. 1



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FIG. 2

200

ACTUAL LOAD TABLE FOR R_I			
DOWNLINK		UPLINK	
BAND	LOAD	BAND	LOAD
B_1^D	$M_{1,i}^D$	B_1^U	$M_{1,i}^U$
B_2^D	$M_{2,i}^D$	B_2^U	$M_{2,i}^U$
\vdots	\vdots	\vdots	\vdots
B_L^D	$M_{L,i}^D$	B_L^U	$M_{L,i}^U$

FIG. 3

300

ACTUAL USER LIST FOR R_i								
MOBILE ID	DOWNLINK				UPLINK			
	B_1^D	B_2^D	...	B_L^D	B_1^U	B_2^U	...	B_L^U
M_1	$C_{1,1}^{i,D}$	$C_{1,2}^{i,D}$...	$C_{1,L}^{i,D}$	$C_{1,1}^{i,U}$	$C_{1,2}^{i,U}$...	$C_{1,L}^{i,U}$
M_2	$C_{2,1}^{i,D}$	$C_{2,2}^{i,D}$...	$C_{2,L}^{i,D}$	$C_{2,1}^{i,U}$	$C_{2,2}^{i,U}$...	$C_{2,L}^{i,U}$
\vdots			
M_K	$C_{K,1}^{i,D}$	$C_{K,2}^{i,D}$...	$C_{K,L}^{i,D}$	$C_{K,1}^{i,U}$	$C_{K,2}^{i,U}$...	$C_{K,L}^{i,U}$

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FIG. 4

NOMINAL RESOURCE AVAILABILITY TABLE 400 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$a_{1,i}^{D,nom}$	B_1^U	$a_{1,i}^{U,nom}$
B_2^D	$a_{2,i}^{D,nom}$	B_2^U	$a_{2,i}^{U,nom}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$a_{L,i}^{D,nom}$	B_L^U	$a_{L,i}^{U,nom}$

FIG. 5

MEASURED RESOURCE AVAILABILITY TABLE 500 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$a_{1,i}^{D,mrd}$	B_1^U	$a_{1,i}^{U,mrd}$
B_2^D	$a_{2,i}^{D,mrd}$	B_2^U	$a_{2,i}^{U,mrd}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$a_{L,i}^{D,mrd}$	B_L^U	$a_{L,i}^{U,mrd}$

FIG. 6

REALISTIC RESOURCE AVAILABILITY TABLE 600 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$a_{1,i}^{D,real}$	B_1^U	$a_{1,i}^{U,real}$
B_2^D	$a_{2,i}^{D,real}$	B_2^U	$a_{2,i}^{U,real}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$a_{L,i}^{D,real}$	B_L^U	$a_{L,i}^{U,real}$

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FIG. 7

RAP NEIGHBORHOOD RECEIVED POWER LIST 700 FOR R_i	
RAP ID	RECEIVED POWER LEVEL
R_{i1}	$P_{i \leftarrow 1}$
R_{i2}	$P_{i \leftarrow 2}$
\vdots	\vdots
R_{iJ}	$P_{i \leftarrow J}$

FIG. 8

DEMAND LIST 800 FOR R_1		
MOBILE ID	# OF REQUESTED RESOURCES	LOCATION IN QUEUE
M_1	λ_1^D, λ_1^U	X_1
M_2	λ_2^D, λ_2^U	X_2
\vdots	\vdots	\vdots
M_K	λ_K^D, λ_K^U	X_K

FIG. 9

PROBABILITY OF ASSIGNMENT TABLE 900 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$p_{1,i}^D$	B_1^U	$p_{1,i}^U$
B_2^D	$p_{2,i}^D$	B_2^U	$p_{2,i}^U$
\vdots	\vdots	\vdots	\vdots
B_L^D	$p_{L,i}^D$	B_L^U	$p_{L,i}^U$

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FIG. 10

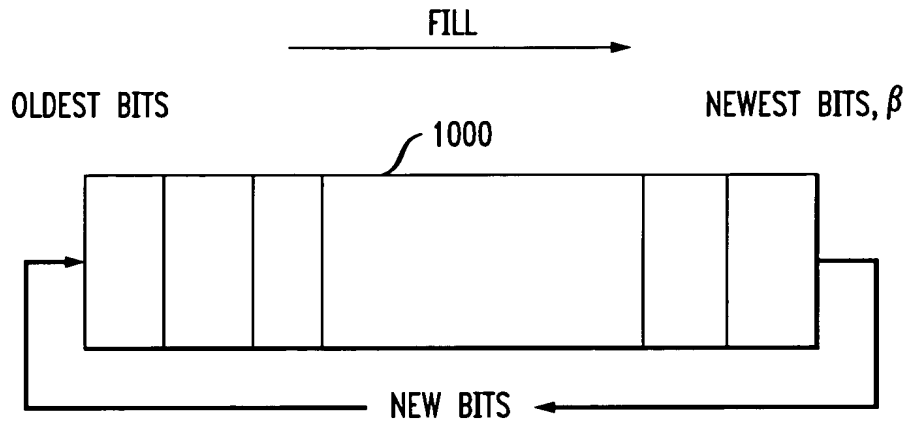


FIG. 11

MOBILE DOWNLINK INTERFERENCE MEASUREMENT TABLE 1100	
BAND	MEASURED INTERFERENCE LEVEL
B_1^D	$I_{1,k}^D$
B_2^D	$I_{2,k}^D$
\vdots	\vdots
B_L^D	$I_{L,k}^D$

FIG. 12

PREDICTED NEW LOAD TABLE 1200 FOR R_i			
DOWNLINK		UPLINK	
BAND	PREDICTED LOAD	BAND	PREDICTED LOAD
B_1^D	$\mu_{1,i}^D$	B_1^U	$\mu_{1,i}^U$
B_2^D	$\mu_{2,i}^D$	B_2^U	$\mu_{2,i}^U$
\vdots	\vdots	\vdots	\vdots
B_L^D	$\mu_{L,i}^D$	B_L^U	$\mu_{L,i}^U$

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FIG. 13

RAP NEIGHBORHOOD PREDICTED LOAD AND AVAILABILITY LIST 1300 FOR R_i		
RAP ID	PREDICTED LOAD	REAL AVAILABILITY
R_{i1}	$\mu_{l,i1}^D, \mu_{l,i1}^U \forall l$	$\alpha_{l,i1}^{D,real}, \alpha_{l,i1}^{U,real} \forall l$
R_{i2}	$\mu_{l,i2}^D, \mu_{l,i2}^U \forall l$	$\alpha_{l,i2}^{D,real}, \alpha_{l,i2}^{U,real} \forall l$
\vdots	\vdots	\vdots
R_{iJ}	$\mu_{l,iJ}^D, \mu_{l,iJ}^U \forall l$	$\alpha_{l,iJ}^{D,real}, \alpha_{l,iJ}^{U,real} \forall l$

FIG. 14

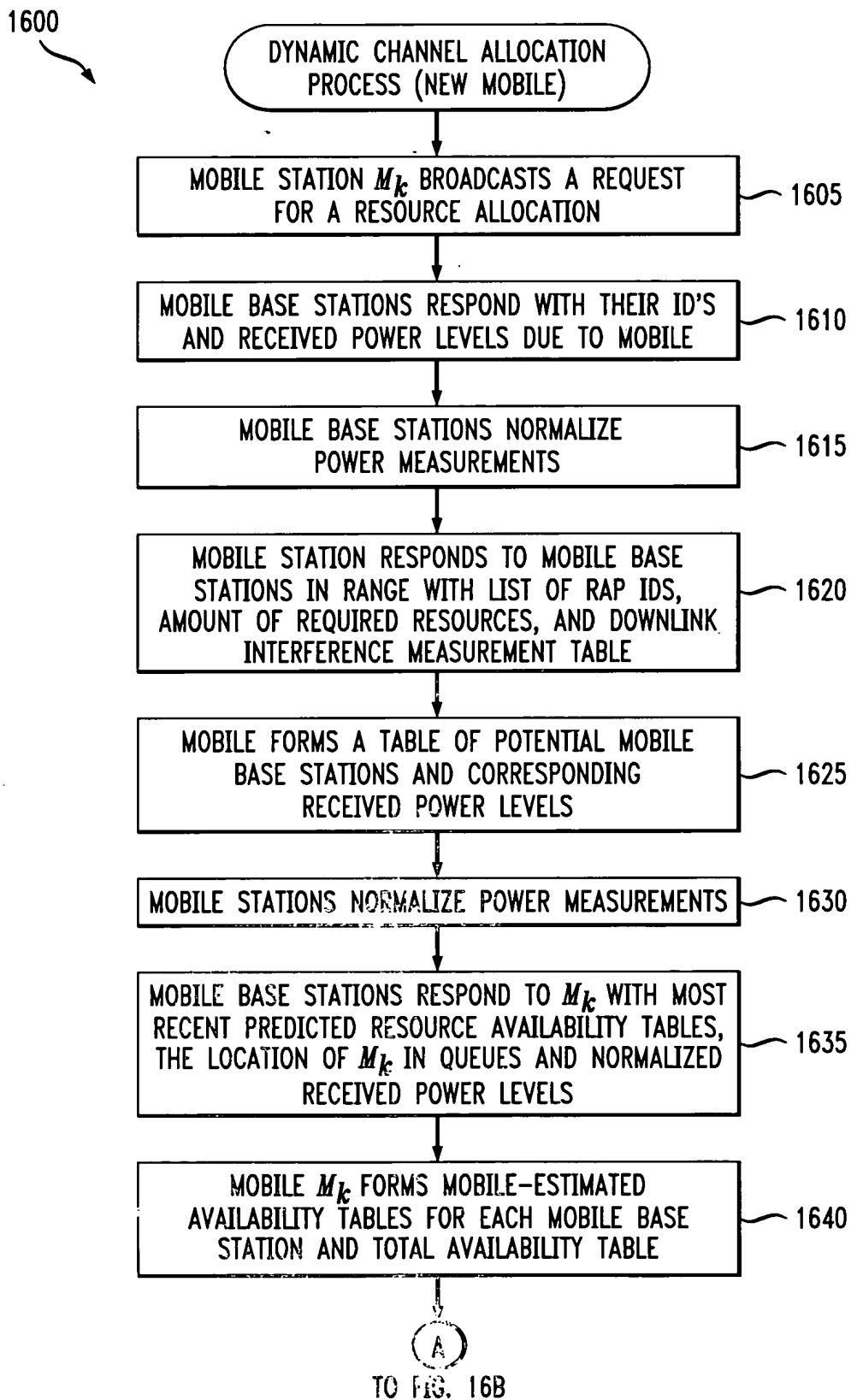
CONSIDERATE RESOURCE AVAILABILITY TABLE 1400 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$\alpha_{1,i}^{D,con}$	B_1^U	$\alpha_{1,i}^{U,con}$
B_2^D	$\alpha_{2,i}^{D,con}$	B_2^U	$\alpha_{2,i}^{U,con}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$\alpha_{L,i}^{D,con}$	B_L^U	$\alpha_{L,i}^{U,con}$

FIG. 15

PREDICTED RESOURCE AVAILABILITY TABLE 1500 FOR R_i			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$\alpha_{1,i}^{D,pred}$	B_1^U	$\alpha_{1,i}^{U,pred}$
B_2^D	$\alpha_{2,i}^{D,pred}$	B_2^U	$\alpha_{2,i}^{U,pred}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$\alpha_{L,i}^{D,pred}$	B_L^U	$\alpha_{L,i}^{U,pred}$

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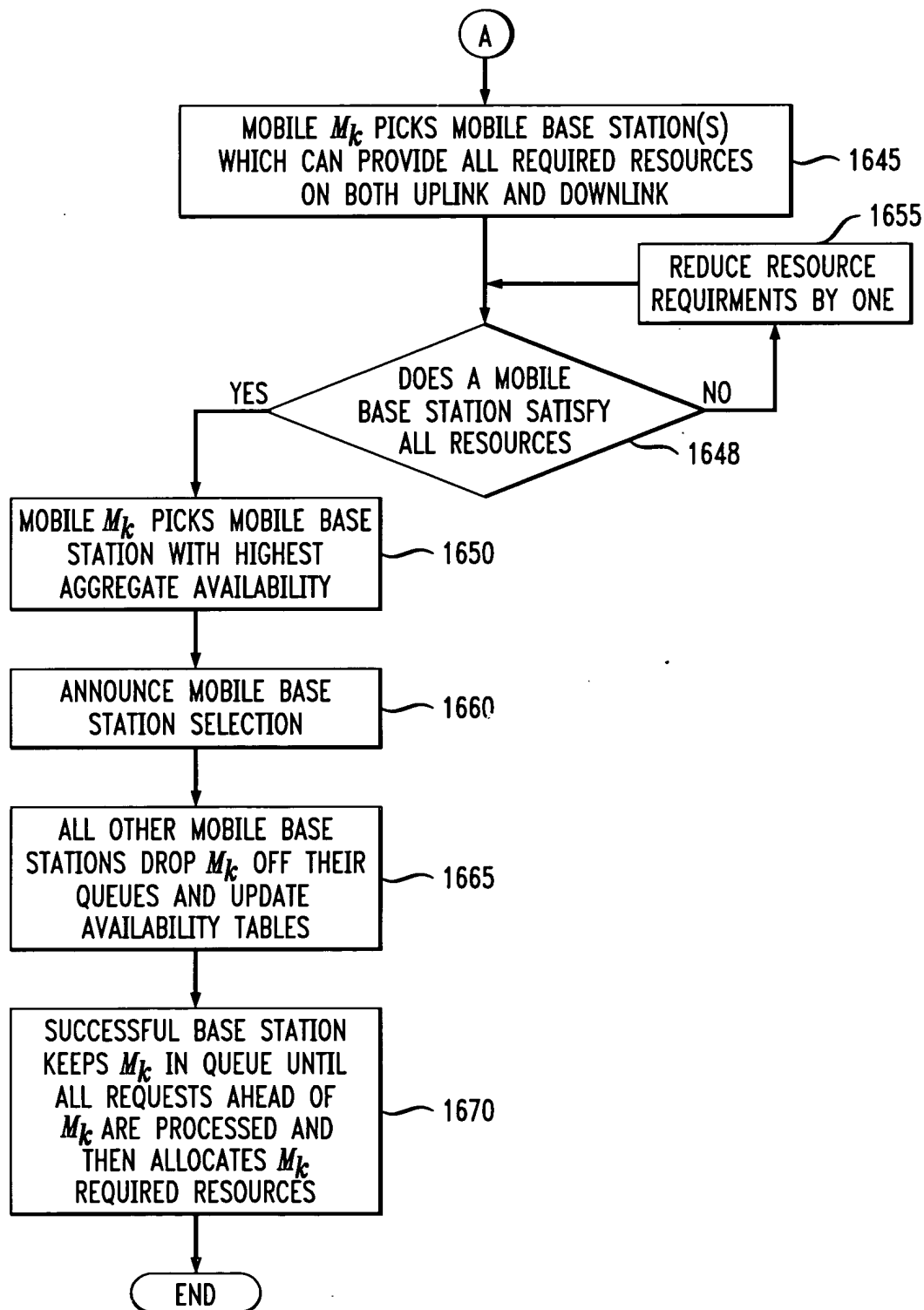
FIG. 16A



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FIG. 16B

FROM FIG. 16A



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FIG. 17

MOBILE-ESTIMATED RESOURCE AVAILABILITY TABLE 1700 FOR R_i FOR M_k			
DOWNLINK		UPLINK	
BAND	AVAIL.	BAND	AVAIL.
B_1^D	$a_{1,i}^{D,MobEst}$	B_1^U	$a_{1,i}^{U,MobEst}$
B_2^D	$a_{2,i}^{D,MobEst}$	B_2^U	$a_{2,i}^{U,MobEst}$
\vdots	\vdots	\vdots	\vdots
B_L^D	$a_{L,i}^{D,MobEst}$	B_L^U	$a_{L,i}^{U,MobEst}$

FIG. 18

MOBILE TOTAL RESOURCE AVAILABILITY TABLE 1800 FOR M_k			
DOWNLINK		UPLINK	
RAP	AVAIL.	RAP	AVAIL.
R_1	$a_i^{D,total}$	R_1	$a_i^{U,total}$
R_2	$a_i^{D,total}$	R_2	$a_i^{U,total}$
\vdots	\vdots	\vdots	\vdots
R_N	$a_i^{D,total}$	R_N	$a_i^{U,total}$

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FIG. 19

1900

